

Serial No: 10/731,167

GERLACH et al.

PF 54173

Appendix I

Current listing of claims:

Please amend claims 1-3, 5 and 9 and add new claim 20 as set forth in the following listing of claims:

1. (currently amended) A process for the catalytic hydrogenation of an aliphatically unsaturated a non-aromatic group in an organic compound in the presence of a catalyst whose preparation has involved precipitation of catalytically active components onto monoclinic, tetragonal or cubic zirconium dioxide, and wherein the catalytically active components of the catalyst before treatment with hydrogen comprise from 20 to 65% by weight of oxygen-containing compounds of zirconium, calculated as ZrO₂, from 1 to 30% by weight of oxygen-containing compounds of copper, calculated as CuO, from 15 to 50% by weight of oxygen-containing compounds of nickel, calculated as NiO, and from 15 to 50% by weight of oxygen-containing compounds of cobalt, calculated as CoO.
2. (currently amended) A process as claimed in claim 1, wherein the catalytically active components precipitated are further comprise metal salts of a an additional metal selected from transition groups VIII and IB of the Periodic Table.
3. (currently amended) A process as claimed in claim 1, 2, wherein the metal salts are basic salts which are sparingly soluble or insoluble in water.
4. (previously presented) A process as claimed in claim 2, wherein the salts are oxides, hydrated oxides, hydroxides, carbonates and/or hydrogen carbonates.
5. (currently amended) A process as claimed in claim 2, wherein the additional metal is selected from the group consisting of Fe, Co, Ni, Ru, Rh, Pd, and Pt and Cu.
6. (canceled)
7. (canceled)

051231

-6-

BEST AVAILABLE COPY

Serial No: 10/731,167

GERLACH et al.

PF 54173

BEST AVAILABLE COPY

8. (canceled)
9. (currently amended) A process as claimed in claim 51, wherein the a molar ratio of nickel to copper is greater than 1.
10. (previously presented) A process as claimed in claim 1, wherein the monoclinic, tetragonal or cubic zirconium dioxide contains one or more oxides of metals of transition groups IIIB or main group IIA of the Periodic Table.
11. (previously presented) A process as claimed in claim 1, wherein the hydrogenation is carried out at from 20 to 300°C.
12. (previously presented) A process as claimed in claim 1, wherein the hydrogenation is carried out in the gas/liquid phase at absolute pressures of from 1 to 320 bar or in the gas phase at pressures of from 1 to 100 bar.
13. (previously presented) A process as claimed in claim 1, wherein the unsaturated group is an aliphatic CC double bond or CN double bond.
14. (previously presented) A process as claimed in claim 1, wherein the unsaturated group is an aliphatic CC triple bond or CN triple bond.
15. (previously presented) A process as claimed in claim 1, wherein the aliphatically unsaturated group is an aldehyde group or keto group.
16. (previously presented) A process as claimed in claim 1 for preparing a secondary amine, wherein the aliphatically unsaturated group is a nitrile group and a reaction with a primary amine is carried out.

051231

-7-

Serial No: 10/731,167

GERLACH et al.

PP 54173

17. (previously presented) A process as claimed in claim 1 for preparing a tertiary amine, wherein the aliphatically unsaturated group is a nitrile group and a reaction with a secondary amine is carried out.
18. (canceled)
19. (canceled)
20. (new) A process as claimed in claim 1 wherein the non-aromatic group in the organic compound is an aliphatically unsaturated group.

BEST AVAILABLE COPY

051231

-8-